

What is claimed is:

1. A method of minimizing the cost of using a component of a computer program, said method comprising the steps of:
 - a) providing said component with a plurality of explicit selectable alternative implementations which share a common component interface and semantics;
 - b) instrumenting said component to gather cost-related information during at least a partial run of said program;
 - c) providing said component with a cost estimator for using said cost-related information to estimate a cost for using each of said explicitly selectable implementations in running said program;
 - d) based on the costs estimated in step (c), selecting one of said explicitly selectable implementations for a subsequent at least partial run of said program..
2. A method as set forth in Claim 1, wherein a default implementation is used during said at least partial run.
3. A method as set forth in Claim 1, wherein selecting step (d) is carried out by an other component operable as a controller.
4. A method as set forth in Claim 1, wherein selecting step (d) is carried out by an application program.

5. A computer readable medium readable by a computer and including
computer instructions for carrying out a method of minimizing the cost of using a
component of a computer program, said method comprising the steps of;
5 a) providing said component with a plurality of explicit selectable alternative
implementations which share a common component interface and semantics;
b) instrumenting said component to gather cost-related information during at
least a partial run of said program;
c) providing said component with a cost estimator for using said cost-related
information to estimate a cost for using each of said explicitly selectable
implementations in running said program;
d) based on the costs estimated in step (c), selecting one of said explicitly
selectable implementations for a subsequent at least partial run of said program..
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6. A computer readable medium as set forth in Claim 5, wherein a default
implementation is used during said at least partial run.

20 7. A computer readable medium as set forth in Claim 5, wherein selecting step
(d) is carried out by an other component operable as a controller.

- 2002-0023-YOR9
- 5 8. A computer readable medium as set forth in Claim 5, wherein selecting step
 (d) is carried out by an application program.
- 10 9. A computer program comprising a plurality of components which interact
 during running thereof, at least one of said components comprising:
 a) a plurality of explicit selectable alternative implementations;
 b) a common interface and semantics for receiving messages from an other one
 of said components and sending messages thereto;
- 15 c) an instrumentation for gathering cost-related information during at least a
 partial run of said computer program;
 d) a cost estimator for using said cost-related information to estimate a cost for
 using each of said explicit selectable alternative implementations; and
 e) a selector for choosing one of said alternative implementations in response to
 a message received at said interface from one of an application program and an
 other one of said components.
- 20 10. A computer program as set forth in Claim 9, wherein one of said
 alternative implementations comprises a default implementation which is
 operational before operation of said selector.

11. A computer program as set forth in Claim 9, said selector being operable to
choose an alternative implementation based upon a cost measurement by said
instrumentation.

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